

OKLAHOMA CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
P.O. BOX 52000  
OKLAHOMA CITY, OK 73152-2000  
(Rule 165:10-3-1)

API NUMBER: 051 23687

Approval Date: 05/15/2013

Expiration Date: 11/15/2013

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 23 Twp: 3N Rge: 5W

County: GRADY

SPOT LOCATION:

SE

NE

NW

NW

FEET FROM QUARTER: FROM

NORTH

FROM

WEST

SECTION LINES:

408

1032

Lease Name: VINSON

Well No: 4H-14

Well will be 408 feet from nearest unit or lease boundary.

Operator Name: NEWFIELD EXPL MIDCONTINENT INC

Telephone: 9188781290

OTC/OCC Number: 20944 0

NEWFIELD EXPL MIDCONTINENT INC  
1 WILLIAMS CTR STE 1900  
TULSA, OK 74172-0162

ROBIN KATHLEEN VAUGHN GENTRY  
P.O. BOX 702  
MT. VERNON TX 75457

Formation(s) (Permit Valid for Listed Formations Only):

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	14671	6	
2	WOODFORD	14928	7	
3	HUNTON	15163	8	
4			9	
5			10	

Spacing Orders: 185688  
185087

Location Exception Orders: 611537

Increased Density Orders: 610822

Pending CD Numbers:

Special Orders:

Total Depth: 20283

Ground Elevation: 1170

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 290

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

**PIT 1 INFORMATION**

Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

B. Solidification of pit contents.

Type of Mud System: WATER BASED

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 13-23363

Chlorides Max: 5000 Average: 3000

H. SEE MEMO

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

## PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 200000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

## HORIZONTAL HOLE 1

Sec 14 Twp 3N Rge 5W County GRADY

Spot Location of End Point: NW NW NE NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 1545

Depth of Deviation: 14170

Radius of Turn: 740

Direction: 5

Total Length: 4950

Measured Total Depth: 20283

True Vertical Depth: 15163

End Point Location from Lease,  
Unit, or Property Line: 50

Additional Surface Owner	Address	City, State, Zip
BENJAMIN BARRESI, COSMO INVES	501 N. WALKER, SUITE 120	OKLAHOMA CITY, OK 73102
ROBERT VAUGHN	210 LAURN LANE	PALMER, AR 99645
MICHAEL A. BIRCH	12316-A N. MAY AVENUE	OKLAHOMA CITY, OK 73120

## Notes:

### Category

### Description

DEEP SURFACE CASING

5/14/2013 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

INCREASED DENSITY - 610822

5/14/2013 - G75 - 14-3N-5W  
X185087/185688 WDFD  
4 WELLS  
NEWFIELD EXPLOR. MID-CONT. INC.  
4-25-2013

LOCATION EXCEPTION - 611537

5/14/2013 - G75 - (I.O.)  
X185087/185688 MSSP, WDFD, HNTN  
SHL NCT 330 FNL, NCT 1320 FWL 23-3N-5W \*\*  
FIRST PERF NCT 165 FSL, NCT 1320 FWL 14-3N-5W  
LAST PERF NCT 165 FNL, NCT 1320 FWL 14-3N-5W  
NEWFIELD EXPLOR. MID-CONT., INC.  
5-13-2013

\*\* ITD HAS SHL AS 408' FNL, 1032' FWL; TO BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER OPERATOR

MEMO

5/14/2013 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, WBM & OBM CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDIFIED, AND BURIED ON SITE; PIT 2 - OBM TO VENDOR

This permit does not address the right of entry or settlement of surface damages.

051 23687 VINSON 4H-14

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

Category	Description
SPACING - 185087	5/14/2013 - G75 - (640) 14-3N-5W EXT 171539 HNTN, OTHERS EST MSSP, WDFD, OTHERS
SPACING - 185688	5/14/2013 - G75 - NPT 185087 CHANGING PARAGRAPH 1 OF ORDER FROM MCCLAIN CO. TO GRADY CO.

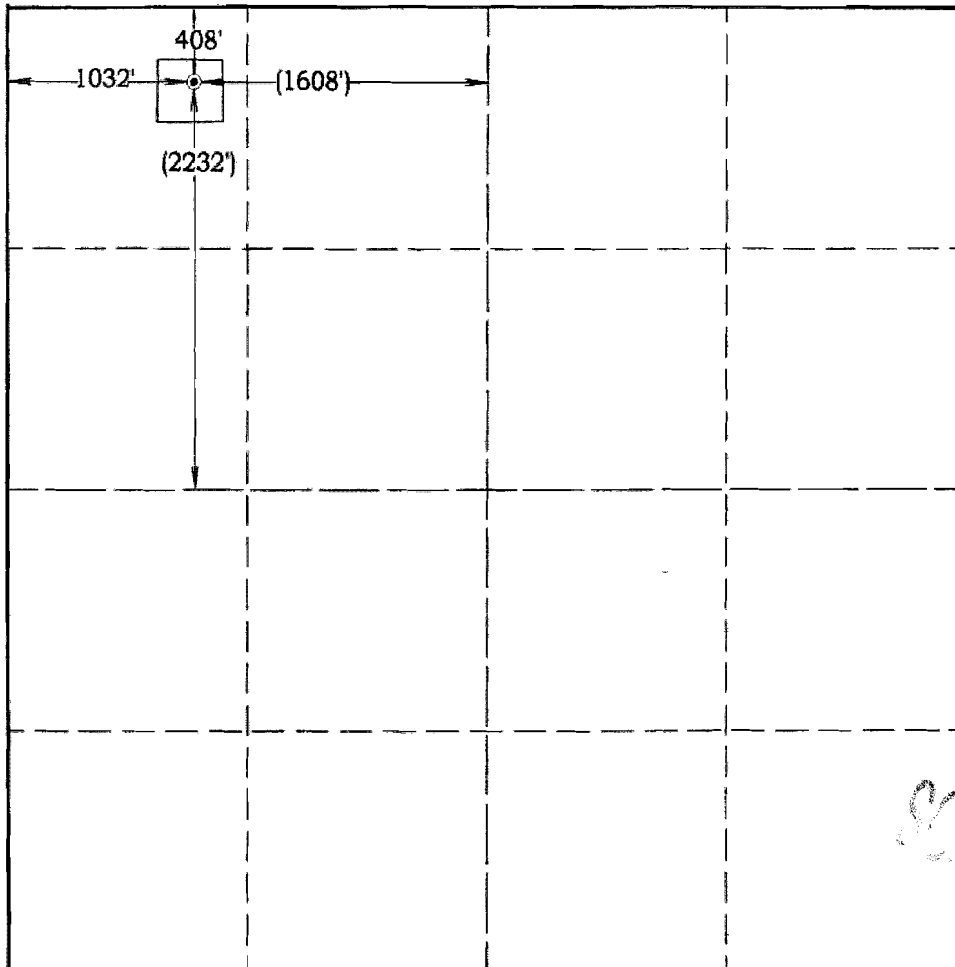
**Well Location Plat**  
**M & M Land Surveying, Inc.**

API 051-23687

520 "E" Street NW. Ardmore, OK. 73401  
Office 580-226-0446 Mobile 580-221-4999 Fax 580-226-7158

Company Name: Newfield Exploration Mid-Continent, Inc. Lease Name: Vinson #4H-14  
Section 23 Township 3 North Range 5 West County Grady Oklahoma

Surface Location 408' FNL - 1032' FWL Elevation 1170' Good Location? Yes Topography Location fell in pasture.



Bearings are based  
on Geodetic North.  
Unless otherwise noted

Scale: 1" = 1000'  
Invoice #13086  
Date 4/11/2013

Elevations of Proposed  
Pad Corners  
NW/C - 1151'  
NE/C - 1167'  
SE/C - 1192'  
SW/C - 1177'

Coordinates were derived  
from GPS RTK methods  
and are only accurate  
within ±10 feet

Location GPS NAD 27  
Oklahoma South

Surface Location  
Latitude: 34.72385°  
Longitude: 97.69994°  
X = 2,090,167'  
Y = 506,160'

Location NAD 83  
Surface Location  
Latitude: 34.72393°  
Longitude: 97.70025°

Best Accessibility to Location  
From the West

Distance & Direction From From the Jct. of SH. #29 & SH. #76 North, go 7 miles West on SH. #29, then 6.2 miles North and 1.6 miles East on County roads to the Northwest Corner of Section 23.  
Highway or Town Section 23.

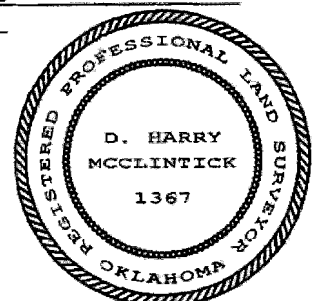
**CERTIFICATE:**

I, D. Harry McClintick, a Registered Land Surveyor in the state of Oklahoma, do hereby certify that the above described Well Location was surveyed and staked on the ground as shown.

*D. Harry McClintick* 11/2/13  
D. Harry McClintick, R.P.L.S. # 1367, CA # 3093

This location has been staked according to the best official survey records available to us, but its accuracy is not guaranteed. Please review this plat and notify us immediately of any discrepancy.

The distances shown in parenthesis ( ) are calculated distances based on the quarter section being 2640' and have not been measured.





Newfield Exploration Mid-  
Continent, Inc.  
One Williams Center; Suite 1900  
Tulsa, OK 741729  
918-582-2690  
Fax: 918-732-1787

API 051-23687

May 13, 2013

Oklahoma Corporation Commission  
Oil & Gas Conservation Division  
P.O. Box 52000-~~0000~~  
Oklahoma City, Oklahoma 73152-2000

ATTN: Manager of the Technical Services Department

RE: Liner Variance Request  
Vinson 4H-14  
Sec 23-03N-05W, Grady County

Dear Sir:

We are requesting a variance to the liner requirements for the burial of oil-based cuttings (OBC) as stated in rules of the Oklahoma Corporation Commission (OCC). We intend to bury the OBC from the above mentioned well using Scott Environmental Services Inc.'s (SESI) stabilization and solidification process, Duro<sup>SM</sup>. Specifically, the request for a variance is because the chosen process cannot be practically carried out under current Oklahoma rules due to the rules stating that OBC burial requires a geomembrane liner but the rules do not allow stirring within geomembrane lined pits.

In a letter dated November 15, 2010, Mr. Tim Baker confirmed that use of a Duro<sup>SM</sup> process had met the requirements of the Commission. It is requested that a variance be approved for this well site, provided that the following conditions are met:

1. A soil liner may be used instead of a geomembrane liner if the unconfined compressive strength (UCS) of the Duro<sup>SM</sup> material is at least 70 pounds per square inch (psi), or
2. No liner is required if the Duro<sup>SM</sup> material meets all of the following conditions:
  - a. A permeability of not more than  $1 \times 10^{-6}$  cm/sec;
  - b. A UCS of at least 35 psi; and
  - c. Concentrations in a leachate of the Duro<sup>SM</sup> material according to EPA's SPLP procedure do not exceed the following values for the constituents named:
    - i. Total Petroleum Hydrocarbons, 100 mg/l;
    - ii. pH, 12.49 SU, plus a lower limit no less than 6;

- iii. Arsenic, 5.00 mg/l;
- iv. Barium, 100 mg/l;
- v. Cadmium, 1.00 mg/l;
- vi. Chromium, 5.00 mg/l;
- vii. Lead, 5.00 mg/l;
- viii. Mercury, 0.20 mg/l;
- ix. Selenium, 1.00 mg/l;
- x. Silver, 5.00 mg/l;
- xi. Zinc, 5.00 mg/l; and
- xii. Benzene, 0.5 mg/l.

The permeability value specified in item 2(a) is the same as that required for a standard soil liner, so that in effect the Duro<sup>SM</sup> processed material becomes its own liner but is even more effective, because the low permeability extends throughout the bulk of the Duro<sup>SM</sup> material.

Conformance with the specified criteria is determined on laboratory samples made with a representative sample of the waste to be subjected to the Duro<sup>SM</sup> process. The results of the testing will be provided to the Pollution Abatement Department of the OCC.

Your prompt attention to this matter is appreciated.

Sincerely,



Daniele Burris  
Regulatory Analyst

cc: WF  
Geoffrey Nielsen

OKLAHOMA

# Corporation Commission

P.O. BOX 52000  
OKLAHOMA CITY OKLAHOMA 73152-2000

255 Jim Thorpe Building  
Telephone: (405)521-2302  
FAX: (405)521-3099

## OIL & GAS CONSERVATION DIVISION



Lori Wrotenberg, Director

November 15, 2010

J. Blake Scott  
Scott Environmental Services, Inc.  
P.O. Box 6215  
Longview, Texas 75608

ARI OSI-23687

RE: Requests for variances to liner requirements for pits used to contain oil-based cuttings or fluids

Dear Mr. Scott:

This is in response to your inquiry concerning the procedure by which operators of wells in the State of Oklahoma regulated by the Commission's Oil and Gas Conservation Division may request variances to liner requirements for pits used to contain oil-based cuttings (OBC). OAC 165:10-7-16(b)(1)(B)(iv) provides that any pit used to contain oil-based drilling fluids, cuttings and/or completion/fracture/workover fluids shall be required to have a geomembrane liner. OAC 165:10-7-16(b)(5) states that any variance from the liner requirements of OAC 165:10-7-16 may be granted by the Manager of the Technical Services Department after receipt of a written request and supporting documentation required by the Department. Operators must submit written requests for variances to liner requirements for pits used to contain OBC to the Commission's Technical Services Department (TSD) Manager as attachments to initial or amended OCC Form 1000 Applications to Drill, Recomplete or Reenter.

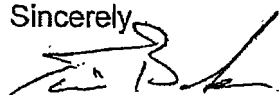
The TSD Manager will require operators to submit documentation in support of requests for variances. Variances to liner requirements for pits containing OBC are not effective until granted by the TSD Manager. If operators requesting variances to liner requirements for pits containing OBC fail to submit acceptable documentation to the TSD Manager, or if such variance requests are denied, then operators are required to deposit the solidified OBC in pits containing geomembrane liners and close the pits as required by OAC 165:10-7-16, or otherwise dispose of the solidified OBC in accordance with Commission rules.

If the processes employed by your company and any other entity demonstrate through the submission of laboratory analyses, chain of custody forms and any other documentation required by the TSD Manager that the solidified OBC for which a variance from the pit liner requirements is sought meet acceptable criteria, then the TSD Manager could approve such variance requests submitted by operators.

Your company has demonstrated in three separate trials to date that solidified OBC for which variances were sought by operators have met the criteria of the Technical Services Department for burying such materials in pits with no geomembrane liners.

If you have any questions concerning the foregoing, please contact me at (405) 522-2763.

Sincerely,



Tim Baker  
Manager, Pollution Abatement Department  
Oklahoma Corporation Commission

Cc: Lori Wrotenbery, Ron Dunkin, Wayne Wright, Grant Ellis, Tony Cupp, Terry Grooms,  
Gayland Darity, Sally Shipley, Keith Thomas, Susan Conrad, Jim Hamilton, Connie Moore